

GP-302959

ADDRESSING ONE MEA FAILURE MODE
BY CONTROLLING MEA CATALYST LAYER OVERLAP

ABSTRACT OF THE DISCLOSURE

A method of addressing one MEA failure mode by controlling MEA catalyst layer overlap, and the apparatus formed thereby is disclosed. The present invention addresses a feature of membrane electrode assembly (MEA) architecture that is associated with field failures due to the loss of ionomer from the edges of the electrolyte. To address ionomer degradation, the present invention provides a MEA design in which the cathode catalyst edges are closer than the anode catalyst edges to the edges of the electrolyte.